

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A grinding machine, comprising:

a housing having a receiving element which receives material;

at least one shaft which is axially mounted in the housing;

a plurality of grinding tools connected to the at least one shaft in an angular position in an axial direction of the least one shaft, each grinding tool having a first transverse cutter, an inner cutting region and an outer cutting region such that the inner cutting region is configured to receive from the receiving element a first amount of material and the outer cutting region is configured to receive from the receiving element a second amount of material, the inner cutting region having a shorter lever arm than the outer cutting region; and

a plurality of rigid cutting tools arranged within the housing in a fixed position on opposing sides of the least one shaft, each rigid cutting tool having teeth arranged in a saw-like manner providing flanks at an angle to each other, and a second transverse cutter wherein the at least one shaft rotates the plurality of grinding tools such that the inner cutting region of a grinding tool grinds the amount of material against ~~the teeth~~ one tooth of the corresponding rigid cutting tool ~~tools~~, while the outer cutting region of said grinding tool grinds the other amount of material against ~~the teeth~~ one further tooth of the rigid cutting tool ~~tools~~ and the first transverse cutter orientates in an offset parallel position toward the second transverse cutter to grind material between the first transverse cutter and the second transverse cutter.

2. (Previously Presented) The grinding machine of claim 1, wherein the plurality of grinding tools are offset in relation to one another in the angular position in an axial direction of the at least one shaft .

3. (Previously Presented) The grinding machine of claim 2, wherein the plurality of grinding tools are arranged in a radial spacing with respect to the axis of the at least one shaft .
4. (Previously Presented) The grinding machine of claim 3, wherein the teeth of the rigid cutting tools extend offset parallel in the axial direction such that the first transverse cutter is oriented toward the second transverse cutter to grind the material in an offset parallel action.
5. (Previously Presented) The grinding machine of claim 1, wherein the at least one shaft has disks on which the grinding tools are arranged; wherein the grinding tools intermesh between the rigid cutting tools and act against the rigid cutting tools in a cutting manner.
6. (Previously Presented) The grinding machine of claim 1, characterized in that wherein the at least one shaft has journals which are detachably joined to the at least one shaft .
7. (Previously Presented) The grinding machine of claim 6, wherein the journals form a bearing region.
8. (Previously Presented) The grinding machine of claim 7, further comprising flanges which form a joint between the journals and the at least one shaft.
9. (Previously Presented) The grinding machine of claim 8, wherein the housing is formed with a double wall at ends of the housing and, in the interspace therein, a disk seal connected to the at least one shaft is provided to form a seal.
10. (Previously Presented) The grinding machine of claim 9, wherein the seal is formed by the flanges.

11. (Previously Presented) The grinding machine of claim 1, wherein the rigid cutting tools are reinforced by wearing elements .

12. (Previously Presented) The grinding machine of claim 1, further comprising a means for controlling the grinding machine wherein a gradient of a parameter of the grinding process or grinding machine is registered and used as a reference variable for control of the grinding machine.

13. (Previously Presented) The grinding machine according to claim 1, wherein the plurality of rigid cutting tools are fixed within the housing in a position separate from the axis of the at least one shaft.

14. (Previously Presented) The grinding machine of claim 1, wherein the inner cutting region and the outer cutting region include contours which form a circular arc about the axis of the at least one shaft in the direction of the axis of the least one shaft.

15. (Currently Amended) ~~The grinding machine of claim 1, wherein~~ A grinding machine, comprising:

a housing having a receiving element which receives material;

at least one shaft which is axially mounted in the housing;

a plurality of grinding tools connected to the at least one shaft in an angular position in an axial direction of the least one shaft, each grinding tool having a first transverse cutter, an inner cutting region and an outer cutting region such that the inner cutting region is configured to receive from the receiving element a first amount of material and the outer cutting region is configured to receive from the receiving element a second amount of material, the second amount of material received by the outer cutting region [[is]] being less than the first amount of material received by the inner cutting region, the inner cutting region having a shorter lever arm than the outer cutting region; and

a plurality of rigid cutting tools arranged within the housing in a fixed position on opposing sides of the least one shaft, each rigid cutting tool having teeth and a second transverse cutter wherein the at least one shaft rotates the plurality of grinding tools such that the inner cutting region grinds the amount of material against the-teeth of the rigid cutting tools, the outer cutting region grinds the other amount of material against the teeth of the rigid cutting tools and the first transverse cutter orientates in an offset parallel position toward the second transverse cutter to grind material between the first transverse cutter and the second transverse cutter.

16. (Previously Presented) The grinding machine of claim 1, wherein the plurality of grinding tools are circumferentially connected to the at least one shaft.

17. (New) The grinding machine of claim 1 wherein imaginary extensions of the cutting edges of the rigid cutting tools do not intersect the axis of the at least one shaft or regions around this axis.